GCE 2004 June Series



Mark Scheme

Economics Unit ECN5

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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Advanced Level Economics

June 2004

ECN 5

Mark Scheme

General Instructions

Marks awarded to candidates should be in accordance with the following mark scheme and examiners should be prepared to use the full range of marks available. The mark scheme for most questions is flexible, permitting the candidate to score full marks in a variety of ways. Where the candidate's response to a question is such that the mark scheme permits full marks to be awarded, full marks **MUST** be given. A perfect answer is not necessarily required for full marks. But conversely, if the candidate's answer does not deserve credit, then no marks should be given.

Occasionally, a candidate may respond to a question in a reasonable way, but the answer may not have been anticipated when the mark scheme was devised. In this situation, **OR WHENEVER YOU HAVE ANY DOUBT ABOUT THE INTERPRETATION OF THE MARK SCHEME**, you must in the first instance telephone your team leader to discuss how to proceed.

Two approaches have been used in the construction of the mark scheme:

- (i) An 'issue' based approach. The mark scheme for parts (a) and (b) of the data response question and part (a) of the essay questions adopts this approach. The questions do not generally require that the candidate demonstrates evaluative skills although some explanation and analysis may be expected. The mark scheme lists the marks that can be awarded for particular issues (and associated development) that the candidate might include in the answer. Marks awarded for development should take into account the Quality of Written Communication used by candidates as indicated on page 5 of this mark scheme.
- (ii) A 'levels' approach. This approach is used for parts (c) and (d) of the data response question and part (b) of the essay questions. The mark scheme summarises the information required to answer the question, but without attaching marks to particular issues. Marks should be awarded according to whether the answer displays the skills indicated by the five Mark Band Descriptors or "Levels of Skill" included in the mark scheme. The Mark Band Descriptors are set out on page 4. When using a 'levels' mark scheme the marker **must** identify where a particular skill is being demonstrated. The key to be used to identify the skill is shown on page 5. The level chosen should be the one which **best fits** the answer provided by the candidate. It is **not** intended that the answer should satisfy every statement in the level description.

APPLYING THE 'LEVELS' MARK SCHEME

Levels of Response Mark Band Descriptors

Level 1

Few, if any, relevant issues are recognised. Economic concepts and principles are not adequately understood or applied to the question and its context. No satisfactory analysis or evaluation. Little, if any, appreciation of the inter-relatedness of economic issues, problems and institutions. A poorly organised response which generally fails to answer the question. Descriptions and explanations lack clarity. Spelling, punctuation and grammar may be poor. There is little use of specialist vocabulary.

0 to 5 marks (Mid-Point: 3 marks)

Level 2

A few issues are recognised but there is only limited evidence of the candidate's ability to apply relevant economic concepts. An attempt is made to answer the question but there is little satisfactory analysis or evaluation. Some very limited appreciation of the inter-relatedness of economic issues, problems and institutions. A poorly organised answer which does not have a clear structure. Descriptions and explanations are sometimes hard to follow. The candidate demonstrates some ability to spell commonly used words and to follow the standard conventions of punctuation and grammar. Some use of specialist vocabulary is made but this is not always applied appropriately.

6 to 10 marks (Mid-Point: 8 marks)

Level 3

A few issues are recognised. The candidate has attempted to apply relevant economic concepts and ideas to the question and its context. A reasonable understanding of some concepts and theories is demonstrated. However, the evaluation of the issues, arguments and evidence is limited or superficial. Some understanding of the inter-relatedness of economic issues, problems and institutions. There is some logic and coherence in the organisation of the answer. The candidate is generally able to spell commonly used words and usually follows the standard conventions of punctuation and grammar. Some descriptions and explanations are easy to understand but the answer may not be expressed clearly throughout. Some use of specialist vocabulary which is applied appropriately.

11 to 17 marks (Mid-Point: 14 marks)

Level 4

Several relevant issues are identified. Good understanding of some economic concepts and principles is demonstrated. The candidate is able to apply these concepts and principles to the context to help answer the question. There is some appreciation of alternative points of view. Satisfactory use is made of evidence and/or theoretical analysis to evaluate the issues and arguments identified. Good understanding of the inter-relatedness of economic issues, problems and institutions is demonstrated. Shows the ability to think as an economist making effective use of the economist's 'tool kit' of concepts, theories and techniques. Spelling is generally accurate and the standard conventions of punctuation and grammar are usually followed. The answer is well organised. Descriptions and explanations are usually clearly expressed. A wide range of specialist vocabulary is used with facility. **18 to 24 marks** (*Mid-Point: 21 marks*)

Level 5

Several relevant issues are identified. Good understanding of economic concepts and principles is demonstrated throughout. The candidate is able to apply these concepts and principles to the context to help answer the question. There is an appreciation of alternative points of view. Good use is made of evidence and/or theoretical analysis to evaluate the issues and arguments identified. The candidate demonstrates the ability to synthesise the arguments presented and come to a reasonable conclusion albeit tentative. A clear understanding of the inter-relatedness of economic issues, problems and institutions is demonstrated. Shows the ability to think as an economist making very effective use of the economist's 'tool kit' of concepts, theories and techniques. Spelling is accurate and the standard conventions of punctuation and grammar are followed. The answer is well organised. Descriptions and explanations are expressed with clarity throughout. Extensive use of specialist vocabulary which is applied adeptly and with precision. **25 to 30 marks** (*Mid-Point: 28 marks*)

THE KEY TO BE USED WHEN USING THE 'LEVELS' MARK SCHEME

- **D** Where a particular economic term is correctly **DEFINED** in order to help the candidate to answer the question properly.
- I Where a relevant **ISSUE** is raised by the candidate.
- **K** Where the candidate demonstrates **KNOWLEDGE** of recent developments or features of the economy which help enhance the candidate's response to the question. This should also be used where the candidate quotes relevant examples.
- Ap Where the candidate demonstrates the ability to APPLY knowledge and CRITICAL UNDERSTANDING to problems and issues.
- A Where the candidate demonstrates the ability to **ANALYSE** the problem using appropriate economic ideas.
- **E** Where the candidate **EVALUATES** and makes judgements about the significance of various issues and arguments.

QUALITY OF WRITTEN COMMUNICATION

The Mark Band Descriptors, which are used for assessing Question 1 (d) and part (b) of the essay questions, incorporate statements which relate to the Quality of Written Communication used by the candidates.

However, it is also important to assess Quality of Written Communication **whenever** candidates produce answers using continuous prose. When applying an issue based mark scheme, examiners must take into account the following when deciding how many marks to award for development:

- (i) use of an appropriate form and style of writing to organise relevant information clearly and coherently;
- (ii) use of specialist vocabulary, where appropriate;
- (iii) legibility of handwriting;
- (iv) accuracy of spelling, punctuation and grammar.

Synoptic Assessment

All questions in this unit are synoptic. Therefore, candidates will need to demonstrate that they are able to think as an economist and to use effectively the economist's 'tool kit' of concepts, theories and techniques.

They should demonstrate that they:

- understand the inter-relatedness of many economic issues, problems and institutions;
- understand how certain economic concepts, theories and techniques may be relevant to a range of different contexts;
- can apply concepts, theories and techniques in analysing economic issues and problems and in evaluating arguments and evidence.

SECTION A

Total for this question: 50 marks

1 (a) Using the evidence in **Extract A**, describe the main changes in membership of trade unions that occurred in the United Kingdom between 1989 and 2000. (4 marks)

For candidates who:

1

describe one main change: and back description with a statistic:

Changes include: the percentage fall in total membership; the percentage fall in male membership; the percentage fall in female membership; comparative change of any two of the above; identification of any year or period in which a percentage rose or stayed level (though only 1 mark for noting exceptions to the percentage decline, however many exceptions are noted.)

Maximum of 2 marks if there is no use of statistics in the data

MAXIMUM FOR PART (a) 4 MARKS

1 (b) Extract B (lines 10-13) identifies three reasons for the changes in the relative importance of collective bargaining and employer determination as methods of setting pay in the UK. Explain two of these reasons. (6 marks)

The three reasons mentioned in Extract B are: changes in the structure of the economy; changes in workers' perceptions of the benefits and costs of union membership; and the impact of government policies aimed at creating a more flexible labour market.

For candidates who:

make a basic statement of how an identified reason may have contributed or is1 markcontributing to the growth in the relative importance of employer determinationand/or the relative decline in the importance of collective bargaining:

develop the explanation:

3 marks

Up to a further

Allow 1 mark (allocated under the changes in the structure of the economy) for a statement that the change in the relative importance of the two methods of pay setting was due to a fall in trade union membership.

To earn more than 3 marks per explanation, the explanation must relate to both the growth in the relative importance of employer determination and/or the relative decline in the importance of collective bargaining

If more than two explanations are given, award marks for the best two and ignore any other explanations. Relevant points to include within explanations are: the decline of manufacturing employment and the increase in service sector employment; decline of employment in traditional unionised skills; the decline in male employment and the growth of female employment; the growth of self-employment; the decline of large businesses and the growth of small businesses; changing attitudes of employers, including overseas-based MNCs locating in the UK; changing workers' attitudes; the impact of employment legislation reducing the powers of unions; a possible reduction in the union wage 'mark-up'.

Maximum of 4 marks if only one reason is explained.

MAXIMUM FOR PART (b) 6 MARKS

1 mark 1 mark 1 (c) "In a market for a good or service, a monopolist would prefer to sell less at a higher price than to increase output, see prices fall and lose profits on existing sales" (Extract C, lines 6 - 7).

Analyse this statement.

(10 marks)

Issues and areas for discussion and explanation include:

- Profit maximisation as a business objective;
- Business objectives other than profit maximisation;
- Explanation of the profit-maximising price and level of output in perfect competition;
- Explanation of the profit-maximising price and level of output in monopoly;
- Comparison and analysis of the two equilibria in relation to the issue posed by the question;
- Explanation and analysis of why, for a monopoly, more can only be sold if the price is set at a lower level;
- Explanation and analysis of the effect on monopoly profit of increasing output beyond the profit-maximising level;
- Explanation and analysis in terms of elasticity of demand.

Candidates should be rewarded for including relevant diagrams to support their analysis, provided the diagrams are accurate and adequately labelled. The question does not require the use of diagrams, but better answers will probably include at least one diagram.

LEVEL 1

At the bottom of the range, the candidate who does not attempt any analysis, but whose answer identifies and defines monopoly. At the top of the range, the candidate who asserts, but does not explain, that in monopoly equilibrium (and/or monopoly profit maximisation), output is lower and price is higher than in perfect competition. **1 to 3 marks**

LEVEL 2

At the bottom of the range, an attempt is made to explain monopoly equilibrium, but mistakes are made. At the top of the range, the candidate accurately explains monopoly equilibrium but does not analyse why a monopoly may *prefer* to sell less at a higher price. 4 to 7 marks

LEVEL 3

At the bottom of the range, the candidate provides a reasonably accurate analysis of why a monopoly might *prefer* to sell less at a higher price, but there is at least one mistake. At the top of the range, the candidate who analyses monopoly equilibrium without mistakes, explaining convincingly why a monopoly might *prefer* to sell less at a higher price.

8 to 10 marks

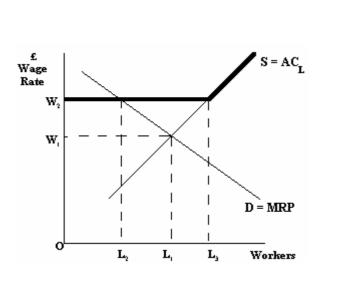
MAXIMUM FOR PART (c) 10 MARKS

1 (d) Using the data and your economic knowledge, evaluate the view that "trade unions raise wages for their members, but only at the expense of jobs" (Extract C, lines 1-2).

(30 marks)

An answer that goes no further than agreeing or disagreeing that trade unions raise wages for their members, but only at the expense of jobs, cannot earn marks beyond Level 3. Explanation/analysis is needed to reach Level 3, and some evaluation, building on analysis, is required to score 18 marks or higher (Level 4). Good answers may argue that, if markets were previously perfectly competitive, an increase in the wage above the market-clearing level is likely to be at the expense of jobs. A diagram similar to (a) below might be used. Explicit analysis of monopsony is not required, but to reach Level 4, candidates need to offer some explanation/analysis of how, under certain circumstances, both wage rates and employment might rise. A union's possible role in assisting management in improving training, motivation and productivity is a relevant argument, as is the macroeconomic argument that, by boosting aggregate demand, higher wages obtained by unions may increase the aggregate demand for labour in the economy.

To reach Level 5, the candidates' arguments must be justified. Good, though not completely accurate analysis and evaluation of both perfectly competitive and imperfectly competitive labour markets should reach a high Level 4 standard. Accurate, or nearly accurate, analysis, with convincing evaluation, will reach Level 5. A monopsony labour market is illustrated in diagram (b). While it is possible to achieve a high mark without the use of diagrams, good answers will probably include, and then explain and analyse, at least one diagram, probably for a perfectly competitive labour market. A diagram showing trade unions shifting the supply curve of labour (and/or possibly also the demand curve for labour) will also be relevant.



Perfectly competitive labour market

(a)

0 L1 L 2 Workers Monopsony labour market

(b)

MC_L

 $S = AC_L$

MRP



£ Wage Rate

W₂

W₁

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Issues and areas for discussion include:

- How trade unions may raise wages;
- Unions' and employers' objectives;
- Perfectly competitive labour markets;
- Imperfectly competitive and monopsony labour markets;
- Marginal productivity theory;
- Conflict between unions and employers;
- Exploitation of workers;
- How unions and employers may work together;
- The distinction between nominal and real wages;
- Use of the data;
- Application of knowledge;
- Overall quality of the evaluation.

USE THE LEVELS MARK SCHEME ON PAGES 4 & 5

MAXIMUM FOR PART (d) 30 MARKS

TOTAL FOR QUESTION 1: 50 MARKS

SECTION B

Each question carries 50 marks

2 (a) With the use of examples, explain the various barriers to entry to a market **and** how these barriers might affect market structure. (20 marks)

For candidates who:

explain the meaning of a barrier to entry to a market:	2 marks
identify a category of barriers e.g. natural and man-made barriers:	3 marks per category
identify or state a particular barrier:	1 mark per barrier
develop an explanation of a particular barrier:	Up to 2 further marks per barrier
provide examples of each category and/or particular barrier and/or of how particular firms or industries are affected by entry barriers:	Up to 2 marks per example, up to a maximum of 8 marks
explain the meaning of market structure:	3 marks
identify particular market structures such as perfect competition, oligopoly and monopoly:	1 mark for naming a market structure up to a maximum of 2marks
state that there are no barriers to entry in a perfectly competitive market:	1 mark
develop this point, e.g. distinguishing between the short and long runs:	Up to 3 further marks
state that barriers to entry exist in monopoly and/or in imperfectly	1 mark
competitive markets: develop this point, e.g. distinguishing between different imperfectly competitive markets:	Up to further 3 marks
briefly state a way in which barriers might affect market structure: develop this point:	2 marks Up to 3 further marks per way

(Ways include: promotion of and protection of oligopoly and monopoly; reduction of competitiveness, and relevant reference (related to market structure) of effects on output, price, efficiency and resource allocation)

Maximum of 14 marks for explaining the various barriers to market entry. Maximum of 8 marks for explaining the various barriers to market entry if no examples are given.

Maximum of 14 marks for explaining how barriers might affect market structure. Maximum of 8 marks for explaining how barriers might affect market structure if no examples are given.

MAXIMUM FOR PART (a) 20 MARKS

2 (b) In the past, utility industries, such as the postal service, electricity and gas, have been heavily protected by entry barriers. Evaluate the possible effects on efficiency and resource allocation of removing these barriers. (30 marks)

While part (a) covers to some extent the effects upon a market of *introducing* barriers to entry, this part of the question is about the opposite effects of *removal* of barriers to entry. An answer that goes no further than asserting that the effects will be completely beneficial (or harmful), without any justification or evaluation of the strengths of the arguments, cannot earn marks beyond Level 3. Likewise, an answer that makes no reasonable reference to a utility industry cannot earn marks beyond Level 4, however good are other aspects of the answer. Explicit definition of a utility industry is not required, though it will usually add focus to the answer. Candidates are likely to choose one of the three industries mentioned in the question, but accept any reasonable example used by the candidate. Explanation/analysis is needed to reach Level 3, and some evaluation building on the analysis is required to score 18 marks (Level 4) or higher. Good answers may argue that, overall, efficiency and resource allocation are likely to improve, but for reasons related to natural monopoly, loss of dynamic efficiency etc., under certain assumptions they could deteriorate. To reach Level 5, the candidate's answer must be justified.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Issues and areas for discussion include:

- Understanding, explicit or implicit, of utility industries;
- Natural monopoly and monopoly power;
- The role of entry barriers in creating and protecting monopoly power;
- The meaning or resource allocation and misallocation;
- Application and analysis of efficiency concepts, particularly allocative and dynamic efficiency, but also productive and static efficiency;
- Perfect competition as a benchmark;
- The benefits of competition;
- Second-best arguments;
- Economies of scale;
- Universal service arguments;
- Relevant reference to chosen examples;
- Relevant use of evidence;
- Overall evaluation.

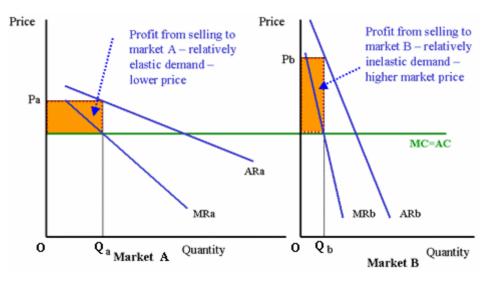
USE THE LEVELS MARK SCHEME ON PAGES 4 & 5

MAXIMUM FOR PART (b) 30 MARKS

TOTAL FOR QUESTION 2: 50 MARKS

3 (a) Explain the meaning of price discrimination **and** the conditions necessary for price discrimination to take place. (20 marks)

There are various forms of price discrimination. Most candidates are likely to explain the form of price discrimination in which a firm with a degree of monopoly power divides the market into two sub-markets and charges different prices in the two sub-markets based on how much the different customers are prepared to pay. If fully answered, both in terms of providing a definition and explaining the conditions necessary for successful price discrimination, such an answer can earn full marks.



Similarly full marks can be earned for defining and explaining perfect price discrimination, in which each customer is charged the maximum price he or she is prepared to pay. Definition and explanation of the form of price discrimination that involves lower prices being charged for bulk sales can earn some, but not full marks.

For candidates who:

state that price discrimination involves charging different prices to different customers :	2 marks
extend this definition by mentioning (i) that the same good is involved: (ii) with the same cost of supply:	2 marks 2 marks
provide an example of price discrimination:	2 marks per example, up to a maximum of 4 marks
use a relevant diagram or diagrams:	Up to 5 marks per diagram or set of diagrams
state that the different prices charged are based on customers' different willingness to pay:	3 marks
develop the explanation of the meaning of price discrimination, for example in terms of the transfer of consumer surplus: explain any other aspect of price discrimination relating either to its meaning or to the conditions necessary, e.g. charging a lower price for bulk buying: briefly state a particular condition necessary for price discrimination to take place:	Up to 3 marks per development Up to 3 marks per aspect 2 marks
explain the significance of the condition:	Up to a further 5 marks per condition

(Conditions include: ability to identify different customers; ability to separate customers; different elasticities of demand at different prices; prevention of seepage; administrative costs must be less than the benefits to the firm(s))

Maximum of 14 marks for explaining the meaning of price discrimination Maximum of 14 marks for explaining the necessary conditions for price discrimination to take place.

MAXIMUM FOR PART (a) 20 MARKS

3 (b) Evaluate the view that, because price discrimination enables firms to make more profit, firms, but not consumers, benefit from price discrimination. (30 marks)

An answer that goes no further than agreeing or disagreeing that only firms and not consumers benefit from price discrimination, cannot earn marks beyond Level 3. Explanation/analysis is needed to reach Level 3, and some evaluation building on the analysis is required to score 18 marks or higher (Level 4).Good answers may argue that price discrimination may *generally* be against consumers' interest, but that consumers can *sometimes* benefit. To reach Level 5, the candidates' arguments must be fully justified.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Issues and areas for discussion include:

- Analysis of how price discrimination enables firms to make more profit;
- Analysis of transfer of consumer surplus;
- Welfare considerations;
- Producer welfare and consumer welfare;
- Conflicts between firms' and consumers' interest;
- Analysis of how output and sales may increase;
- Analysis of how low-income consumers may benefit;
- Explanation and analysis of how, without price discrimination, it may be uneconomic to provide a good or service;
- Analysis of how, with bulk-buying consumers may benefit;
- Use of examples and evidence;
- Overall evaluation.

USE THE LEVELS MARK SCHEME ON PAGES 4 & 5

MAXIMUM FOR PART (b) 30 MARKS

TOTAL FOR QUESTION 3: 50 MARKS

4 (a) Explain the main features of cost benefit analysis **and two** problems encountered in its use. (20 marks)

For candidates who:

state that CBA is a technique used to evaluate economic policies or decisions:	2 marks
briefly state a feature of cost-benefit analysis:	1 mark per feature
explain in greater depth the identified feature:	Up to 4 further marks per feature
(Features include: the nature of the projects evaluated by CBA; the evaluation of social and not just private costs and benefits; evaluating externalities; particular costs and benefits; methods of measurement of costs and benefits; the discounting principle. Private costs and/or benefits are 1 feature. Likewise, for external costs and/or benefits and social costs and/or benefits.)	

provide examples of projects etc. which have been subjected to CBA, or which could reasonably be subjected to a future CBA:	Up to 2 marks per example, up to a maximum of 4 marks
(For this question, widening motorways does not count as an example.)	
briefly identify a problem encountered in the use of CBA:	2 marks each problem
explain in greater depth the identified problem:	Up to 6 further marks per problem
provide examples of problems that have affected particular analysis of particular projects, or which might affect a future analysis:	2 marks per example, up to a maximum of 4 marks

Maximum of 14 marks for the features of cost benefit analysis Maximum of 14 marks for explaining two problems encountered

(If candidates explain more than two problems, award marks only for the best two explanations)

MAXIMUM FOR PART (a) 20 MARKS

4 (b) The government is considering widening all the main motorways in the UK from three to four lanes in order to reduce traffic congestion.

Evaluate the view that a decision to widen major motorways can be justified because private motorists and industry will benefit. (30 marks)

An answer that goes no further than agreeing or disagreeing that motorway widening is justified, without developing the prompt from part (a) of the question that all the benefits and costs must be evaluated, cannot earn marks beyond Level 3. Explanation/analysis is needed to reach Level 3, and some evaluation building on the analysis is required to score 18 marks or higher (Level 4). Good answers may argue that *some*, but not all, widening of motorways might be justified, but that this cannot be concluded without proper analysis in each case. To reach Level 5, the candidate's arguments must be fully justified.

The issues identified below are intended to provide an indication of some of the areas which might be discussed. Candidates can only be expected to consider a few of these issues in the time available.

Issues and areas for discussion include:

- The private and external benefits of motorways, including benefits for producers and consumers, the relieving congestion on non-motorway roads;
- The private and external costs of motorways, including destruction of the countryside and the environment;
- Would widening actually reduce congestion;
- Alternatives to widening, such as promoting other forms of travel, road pricing etc.;
- Does under-pricing of motorways lead to their over-use?;
- Public versus private transport issues;
- Motorways as a public good;
- Appropriateness of CBA to decide the issue;
- Who would pay for motorway widening?;
- Market failure and government failure;
- Issues of resource allocation and misallocation, opportunity costs;
- Use of evidence;
- Overall evaluation of arguments.

USE THE LEVELS MARK SCHEME ON PAGES 4 & 5

MAXIMUM FOR PART (b) 30 MARKS

TOTAL FOR QUESTION 4: 50 MARKS